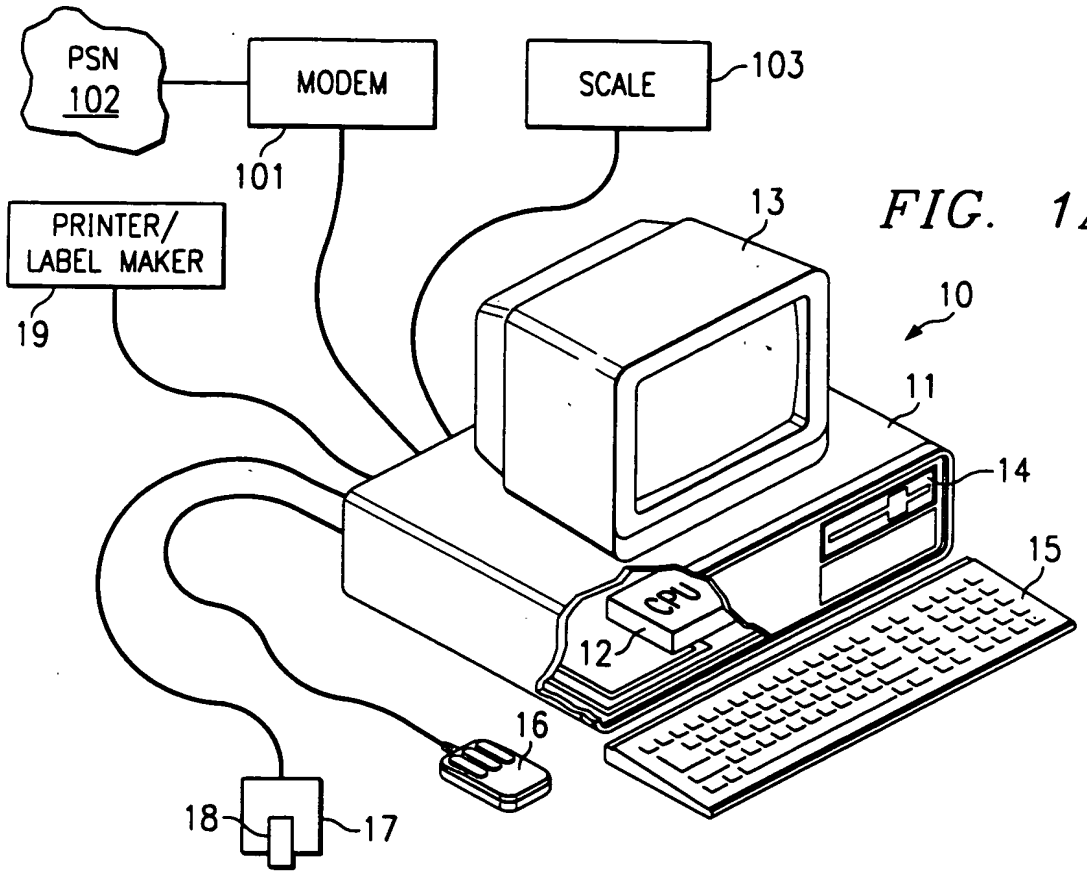
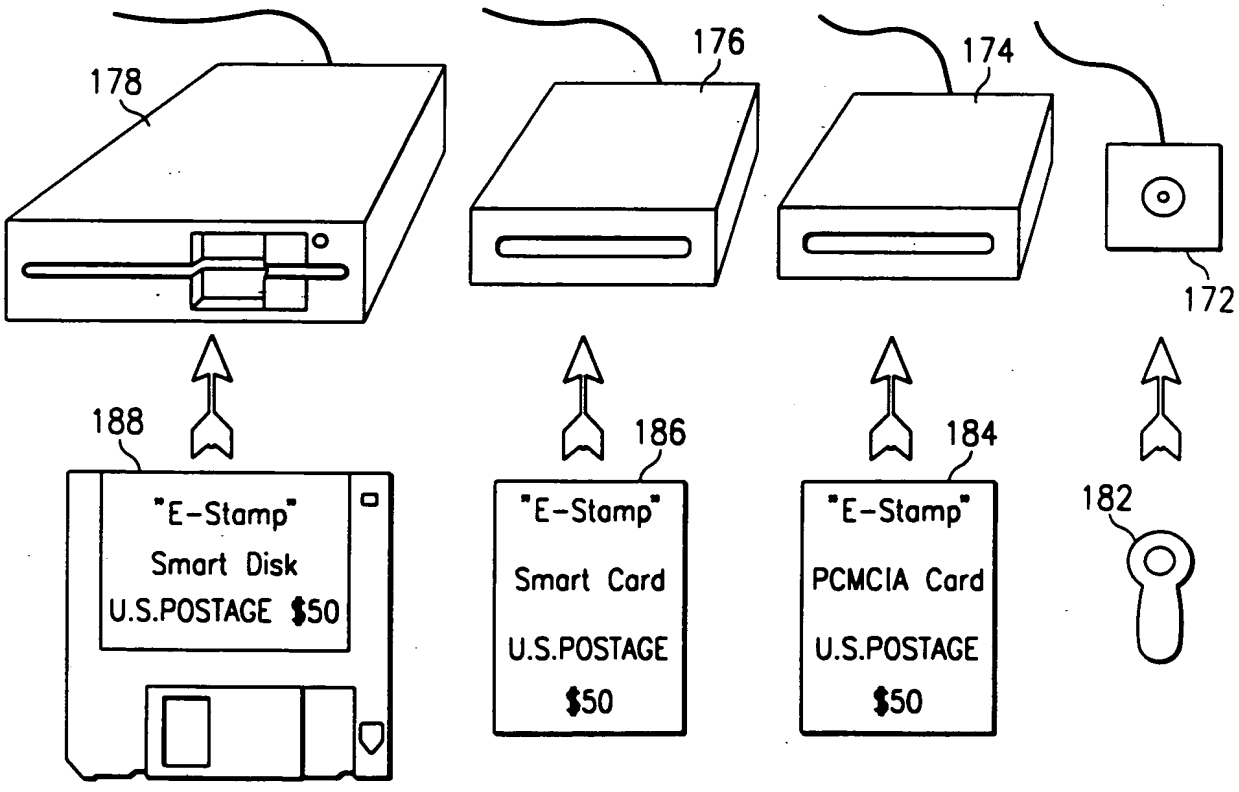

PSN
102
MODEM
101
SCALE
103
PRINTER/
LABEL MAKER
19
13
10
11
14
15
CPU
12
16
18
17

FIG. 1A

FIG. 1B


178
176
174
172
188
"E-Stamp"
Smart Disk
U.S.POSTAGE $50
186
"E-Stamp"
Smart Card
U.S.POSTAGE
$50
184
"E-Stamp"
PCMCIA Card
U.S.POSTAGE
$50
182

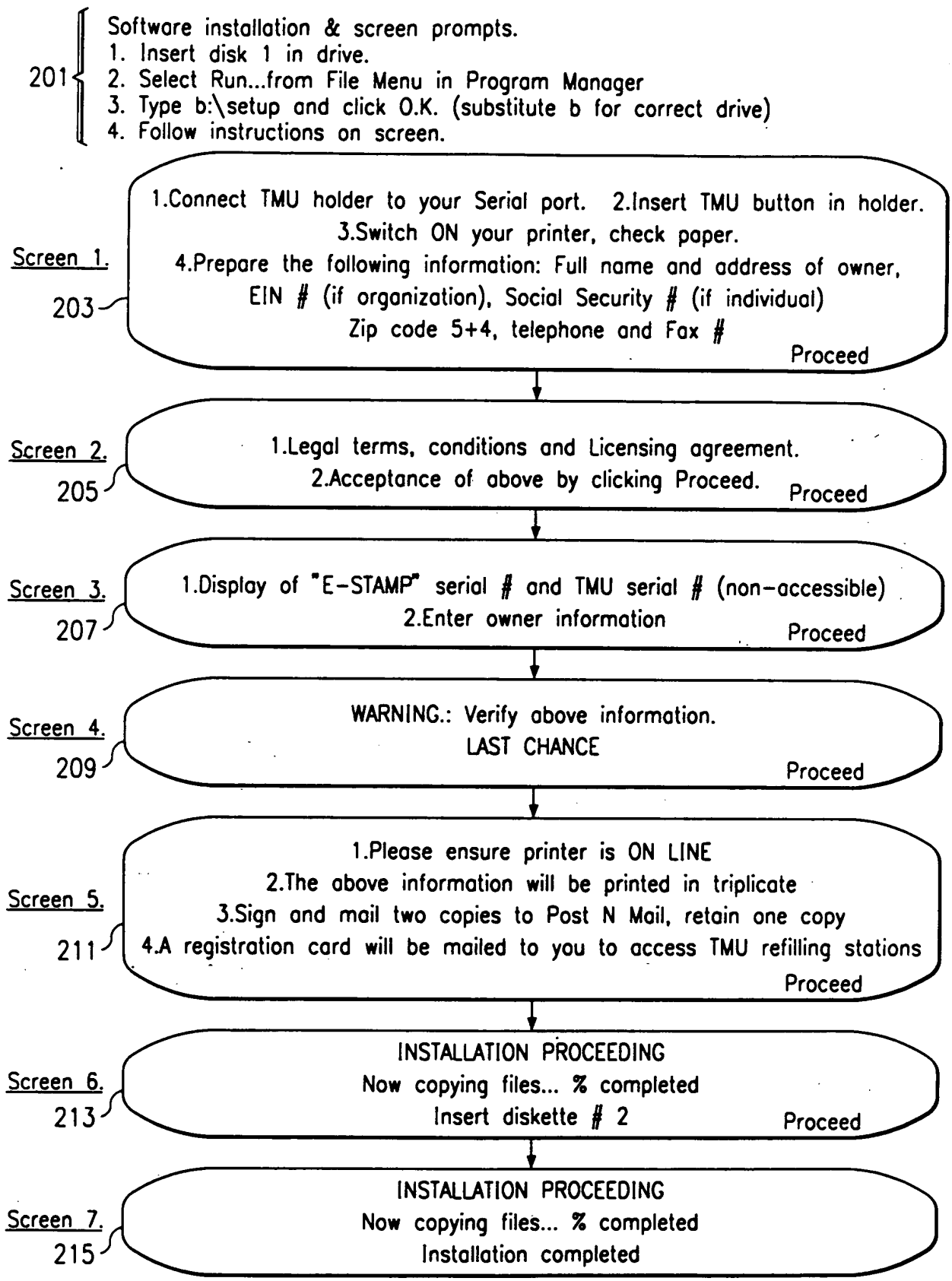

"E-Stamp" - Post N Mail, Inc.
201
Software installation & screen prompts.
1. Insert disk 1 in drive.
2. Select Run...from File Menu in Program Manager
3. Type b:\setup and click O.K. (substitute b for correct drive)
4. Follow instructions on screen.
Screen 1.
203
1.Connect TMU holder to your Serial port. 2.Insert TMU button in holder.
3.Switch ON your printer, check paper.
4.Prepare the following information: Full name and address of owner,
EIN # (if organization), Social Security # (if individual)
Zip code 5+4, telephone and Fax #
Proceed
Screen 2.
205
1.Legal terms, conditions and Licensing agreement.
2.Acceptance of above by clicking Proceed.
Proceed
Screen 3.
207
1.Display of "E-STAMP" serial # and TMU serial # (non-accessible)
2.Enter owner information
Proceed
Screen 4.
209
WARNING.: Verify above information.
LAST CHANCE
Proceed
Screen 5.
211
1.Please ensure printer is ON LINE
2.The above information will be printed in triplicate
3.Sign and mail two copies to Post N Mail, retain one copy
4.A registration card will be mailed to you to access TMU refilling stations
Proceed
Screen 6.
213
INSTALLATION PROCEEDING
Now copying files... % completed
Insert diskette # 2
Proceed
Screen 7.
215
INSTALLATION PROCEEDING
Now copying files... % completed
Installation completed

FIG. 2

Post N Mail, Inc.
505 Cypress Station Dr. Suite # 505
Houston, Tx 77030-1612
Telephone (713)583-8909 Fax (713)699-0101

"E-Stamp"™ - Registration form

31 T.M.U. Button Serial #000000001 Date: April 20, 1994
32 E-Stamp Serial #000000001 Time: 01:29 AM } 33

35
Registered user:
Individual Salim G. Kara Social Security # 636-18-0137
Organization Global Impex, Inc. Employer I.N. # 76-0422781
Address: 505 Cypress Station Dr.
Suite #505
City: Houston State: Tx Zipcode+4: 77090-1612
Telephone: (713)583-8909 Fax: (713)699-0101

Post N Mail License Agreement

38
This is a legal agreement between you (an individual or an entity), the end user, and Post N Mail, Inc. If you do not agree to the terms of this Agreement, promptly return the disk package and accompanying items (including all hardware, written materials and binders or other containers) to the place you obtained them for a full refund.
License
1. Grant of License.
2. Term of License.
3. Copyright.
4. Other restrictions.
5. Limited warranty.
6. Customer remedies.
7. No Other Warranties.
8. No Liability for Consequential Damages.

308
_____
Signature

FIG. 3A

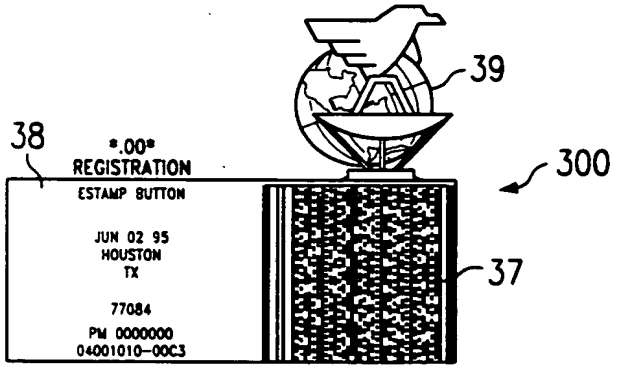


FIG. 3B

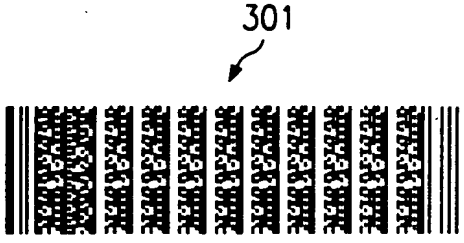


FIG. 3C

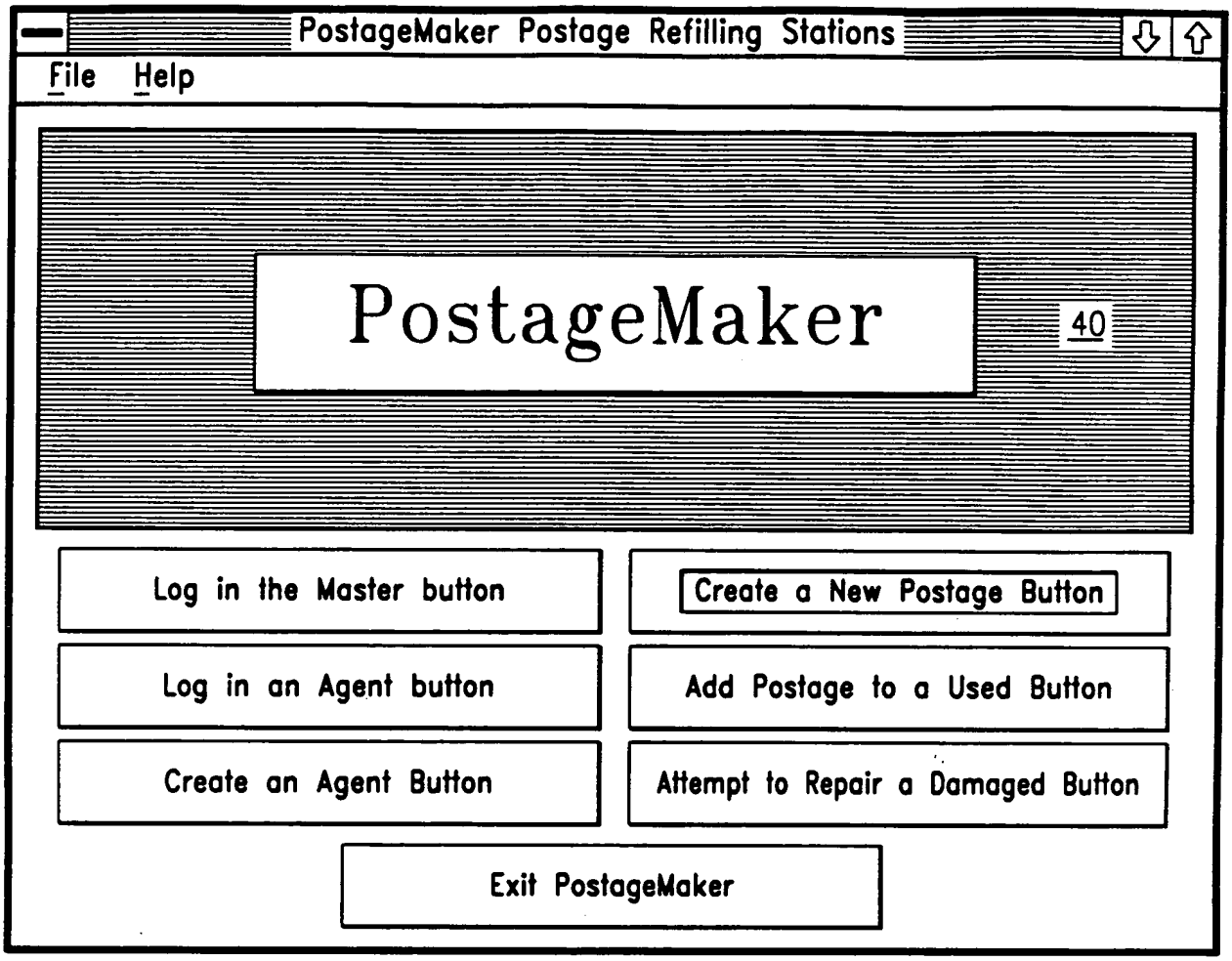

PostageMaker Postage Refilling Stations
File Help
PostageMaker
40
Log in the Master button
Create a New Postage Button
Log in an Agent button
Add Postage to a Used Button
Create an Agent Button
Attempt to Repair a Damaged Button
Exit PostageMaker

FIG. 4A

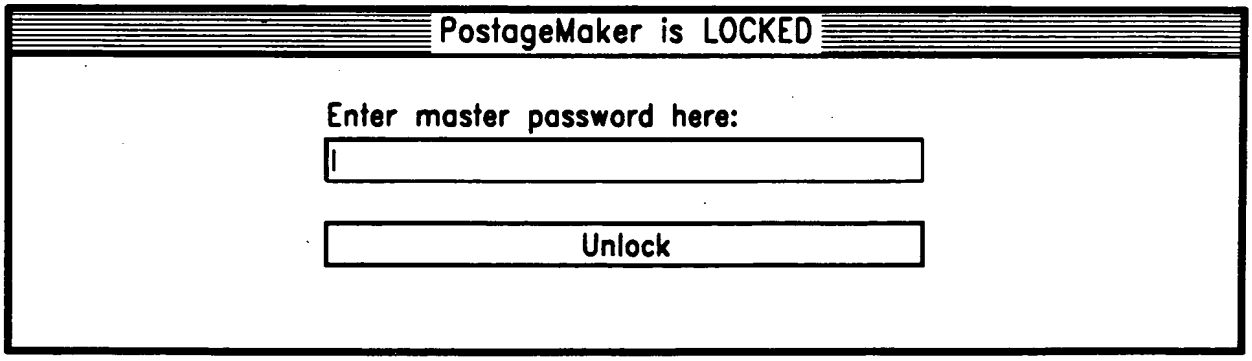

PostageMaker is LOCKED
Enter master password here:
Unlock

FIG. 4B

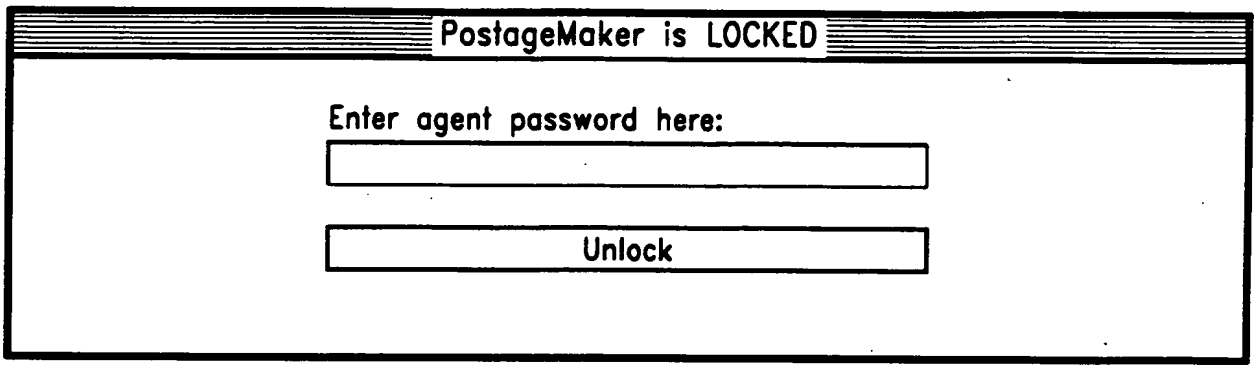


FIG. 4C

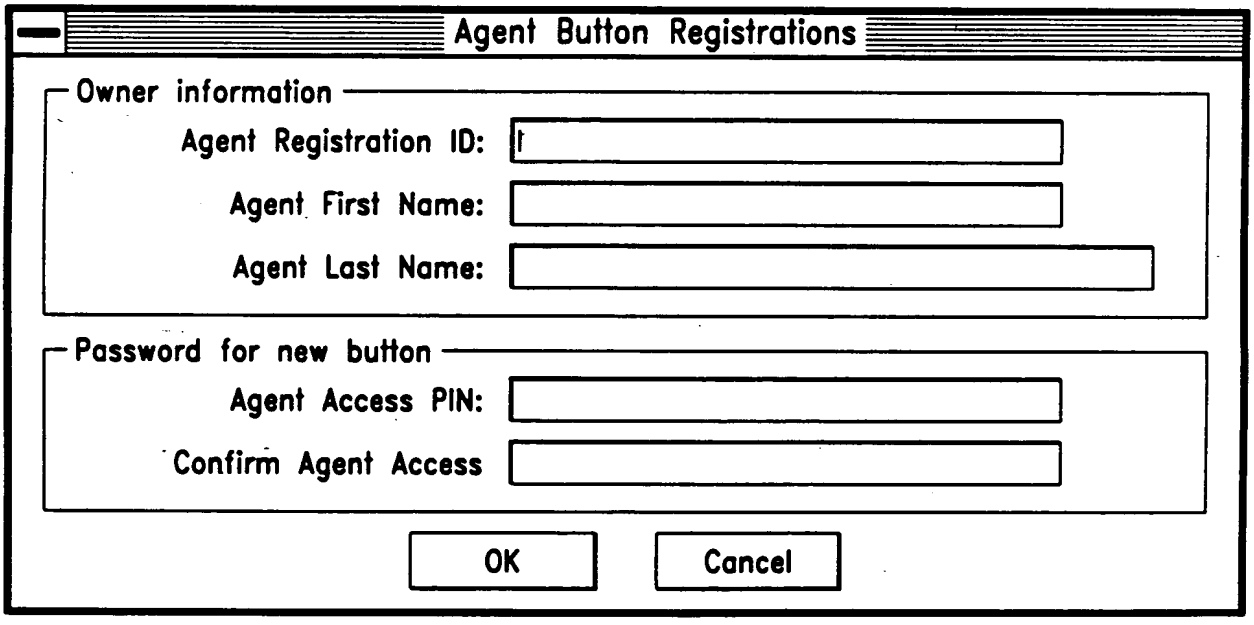


FIG. 4D

Docket No. 45923-P000C2CP1C1

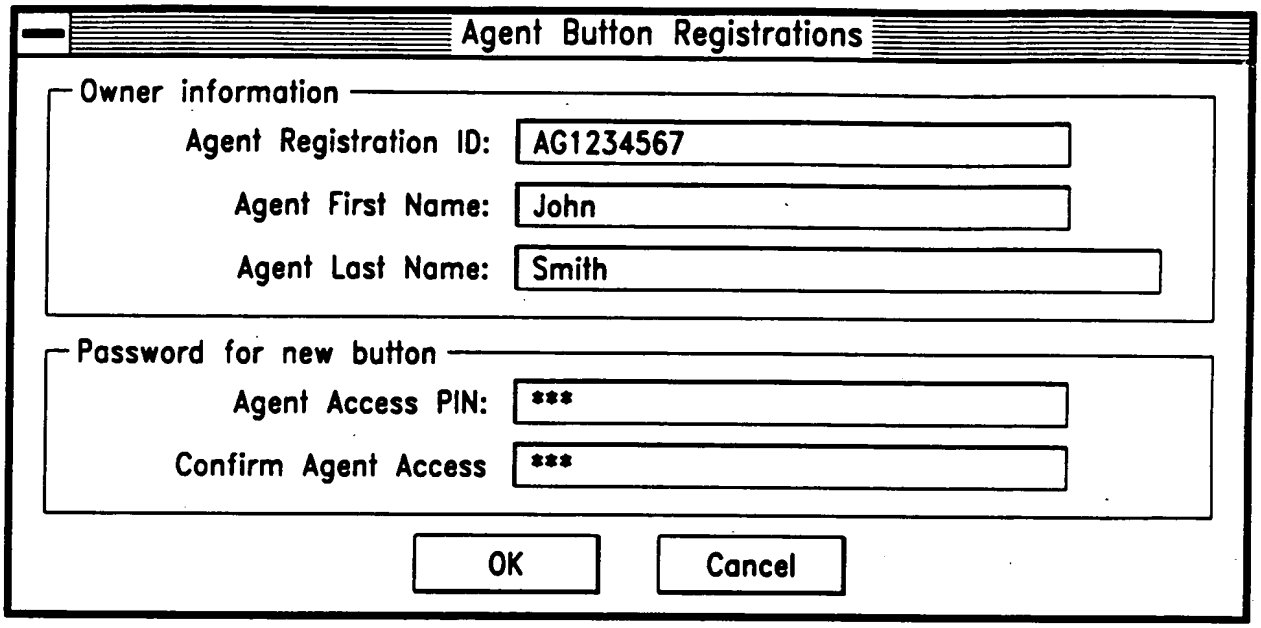


FIG. 4E

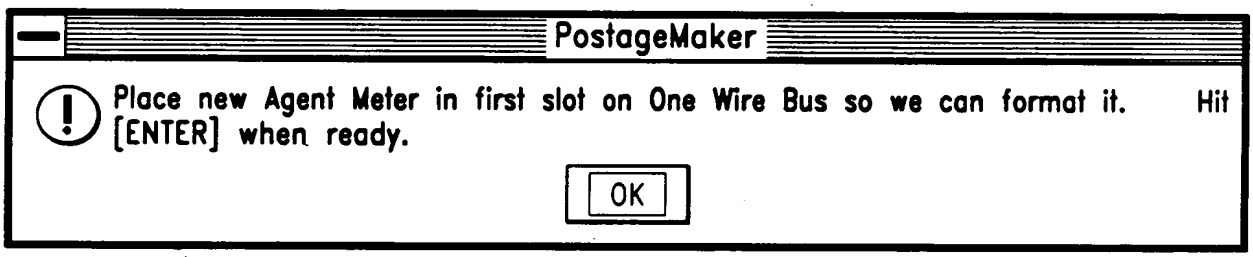


FIG. 4F

FIG. 4G

Postage Meter Exhibit 1015 Page 00014

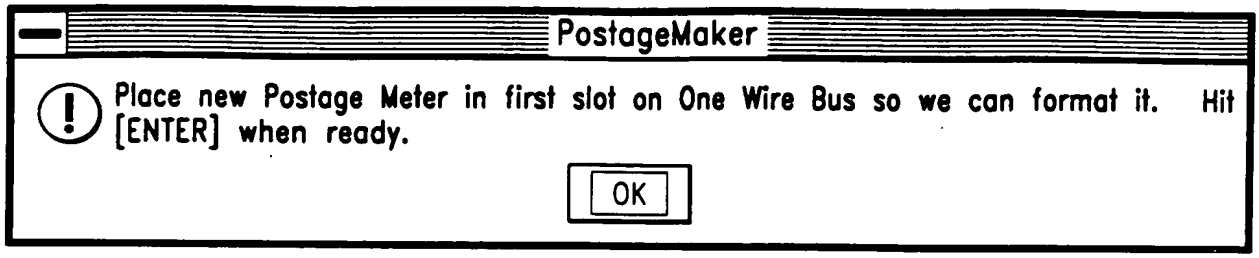


FIG. 4H

RECEIPT RECEIPT NO: AG7654321

POSTAGE BUTTON REFILL SERVICES 5/25

TRANSACTION:

AUTHORIZATION CODE: MA1234567

TRANSACTION DATE: 5/25/95
TRANSACTION TYPE: INITIALIZE
TRANSACTION AMOUNT: 2.00

POSTAGE BUTTON:

SERIAL NO: 0800101000E0

OWNER:
OWNER ZIP CODE:
TRANSACTION COUNTER: 00
REMAINING CREDIT BALANCE: 2.00

FIG. 4I

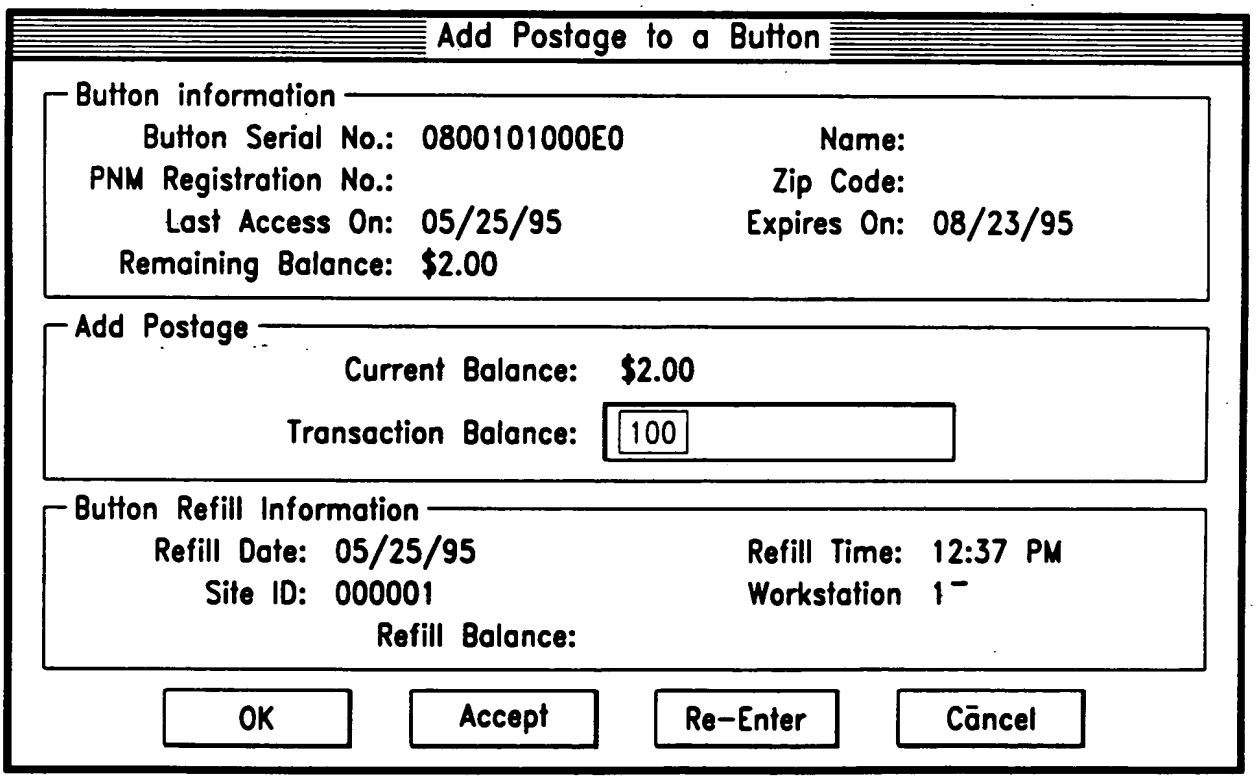


FIG. 4J

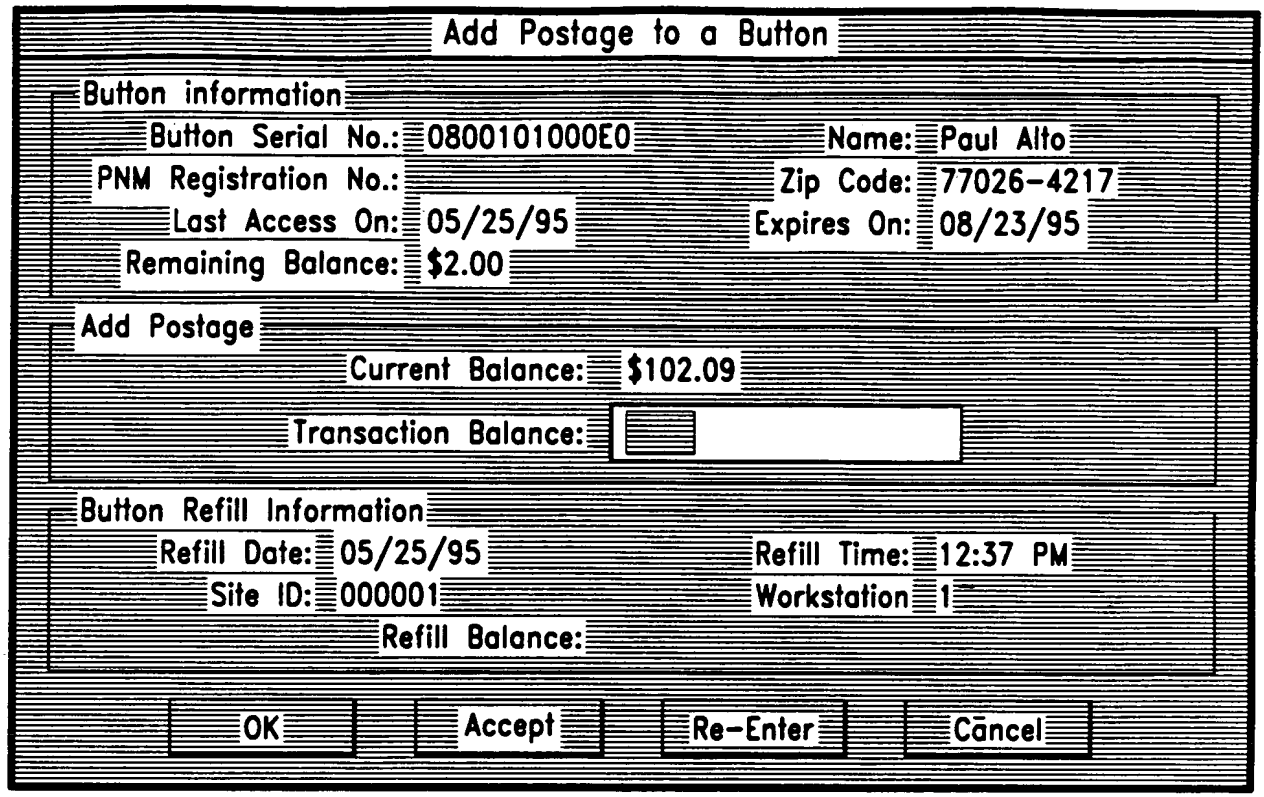

Add Postage to a Button
Button information
Button Serial No.: 0800101000E0
Name: Paul Alto
PNM Registration No.:
Zip Code: 77026-4217
Last Access On: 05/25/95
Expires On: 08/23/95
Remaining Balance: $2.00
Add Postage
Current Balance: $102.09
Transaction Balance:
Button Refill Information
Refill Date: 05/25/95
Refill Time: 12:37 PM
Site ID: 000001
Workstation 1
Refill Balance:
OK
Accept
Re-Enter
Cancel

FIG. 4K

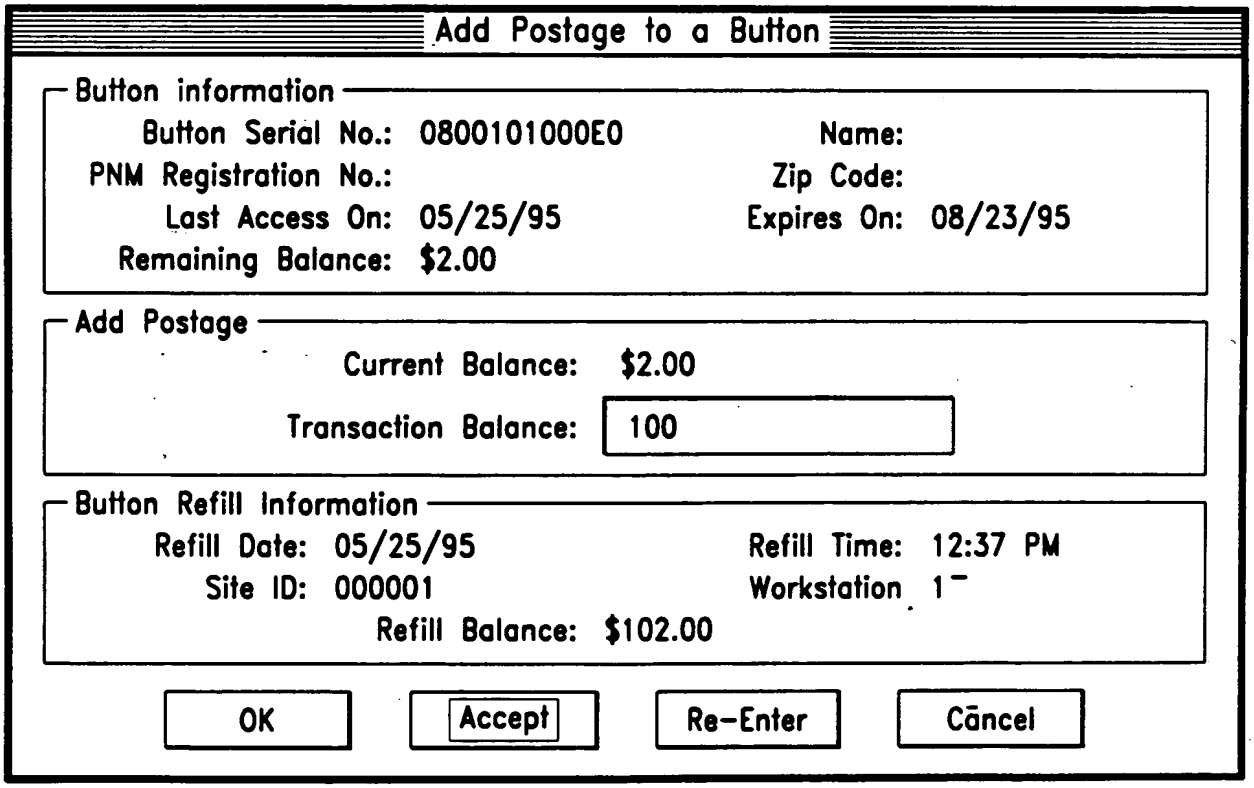

Add Postage to a Button
Button information
Button Serial No.: 0800101000E0
Name:
PNM Registration No.:
Zip Code:
Last Access On: 05/25/95
Expires On: 08/23/95
Remaining Balance: $2.00
Add Postage
Current Balance: $2.00
Transaction Balance: 100
Button Refill Information
Refill Date: 05/25/95
Refill Time: 12:37 PM
Site ID: 000001
Workstation 1
Refill Balance: $102.00
OK
Accept
Re-Enter
Cancel

FIG. 4L

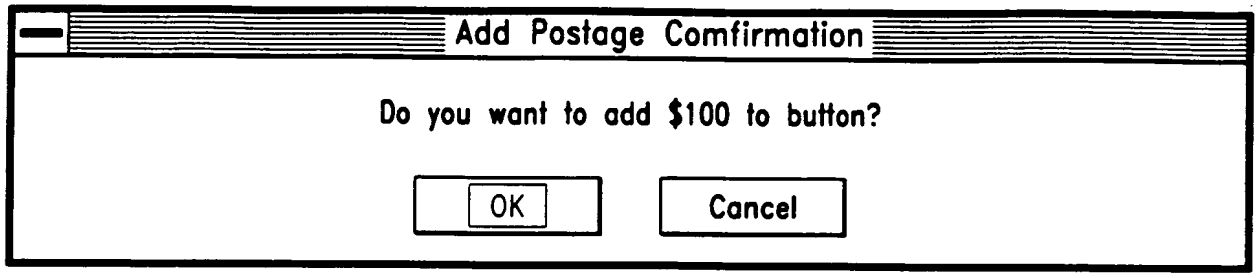


FIG. 4M

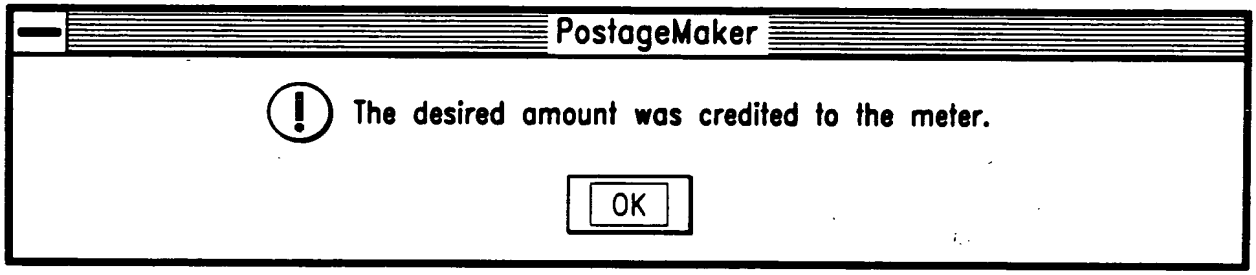


FIG. 4N

RECEIPT RECEIPT NO: AG7654321

POSTAGE BUTTON REFILL SERVICES 5/25

TRANSACTION:

AUTHORIZATION CODE: MA1234567

TRANSACTION DATE: 5/25/95
TRANSACTION TYPE: CREDIT
TRANSACTION AMOUNT: 100.00

POSTAGE BUTTON:

SERIAL NO: 0800101000E0

OWNER:
OWNER ZIP CODE:
TRANSACTION COUNTER: 01
REMAINING CREDIT BALANCE: 102.00

FIG. 4O

PD-0950-0950-1205-0950-0950-0950

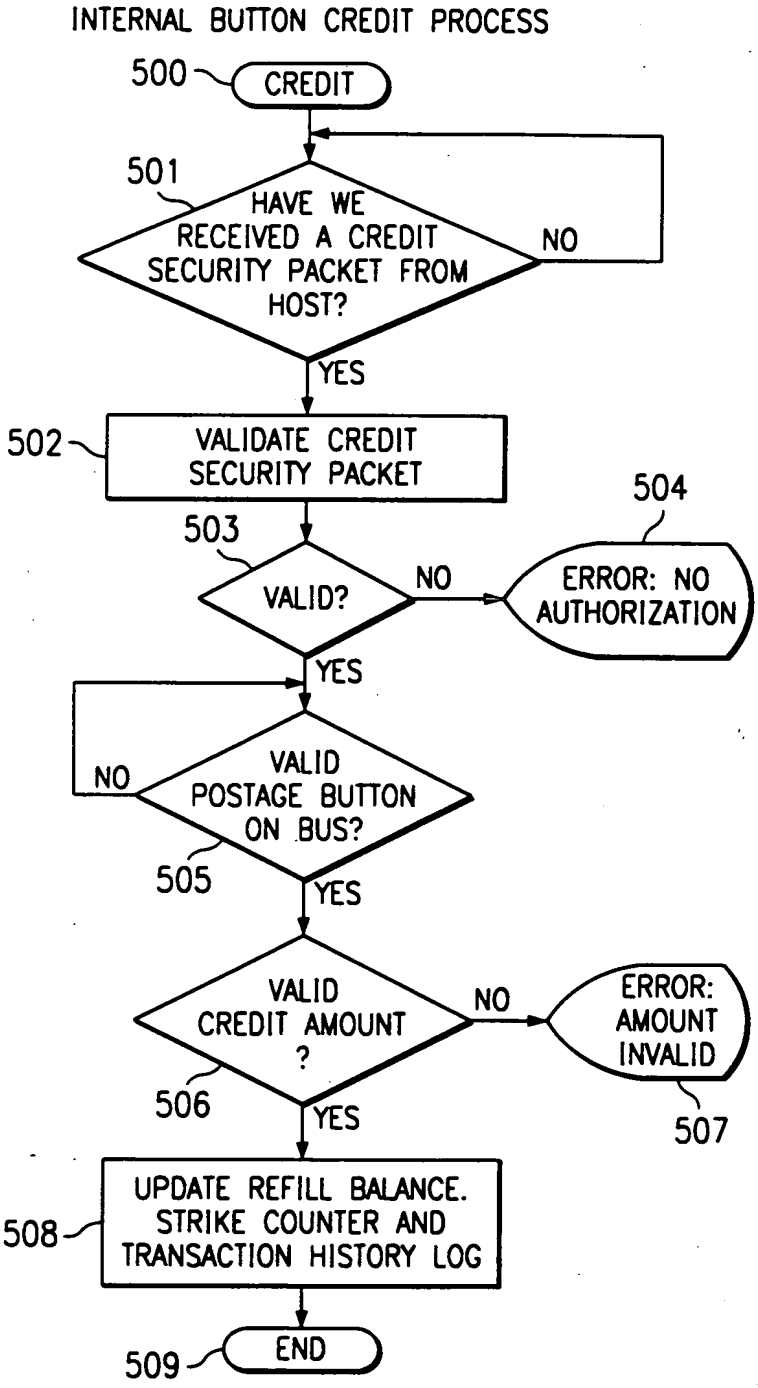

INTERNAL BUTTON CREDIT PROCESS
500
CREDIT
501
HAVE WE RECEIVED A CREDIT SECURITY PACKET FROM HOST?
NO
YES
502
VALIDATE CREDIT SECURITY PACKET
503
VALID?
NO
504
ERROR: NO AUTHORIZATION
YES
NO
VALID POSTAGE BUTTON ON BUS?
505
YES
VALID CREDIT AMOUNT ?
NO
ERROR: AMOUNT INVALID
506
YES
507
508
UPDATE REFILL BALANCE. STRIKE COUNTER AND TRANSACTION HISTORY LOG
509
END

FIG. 5A

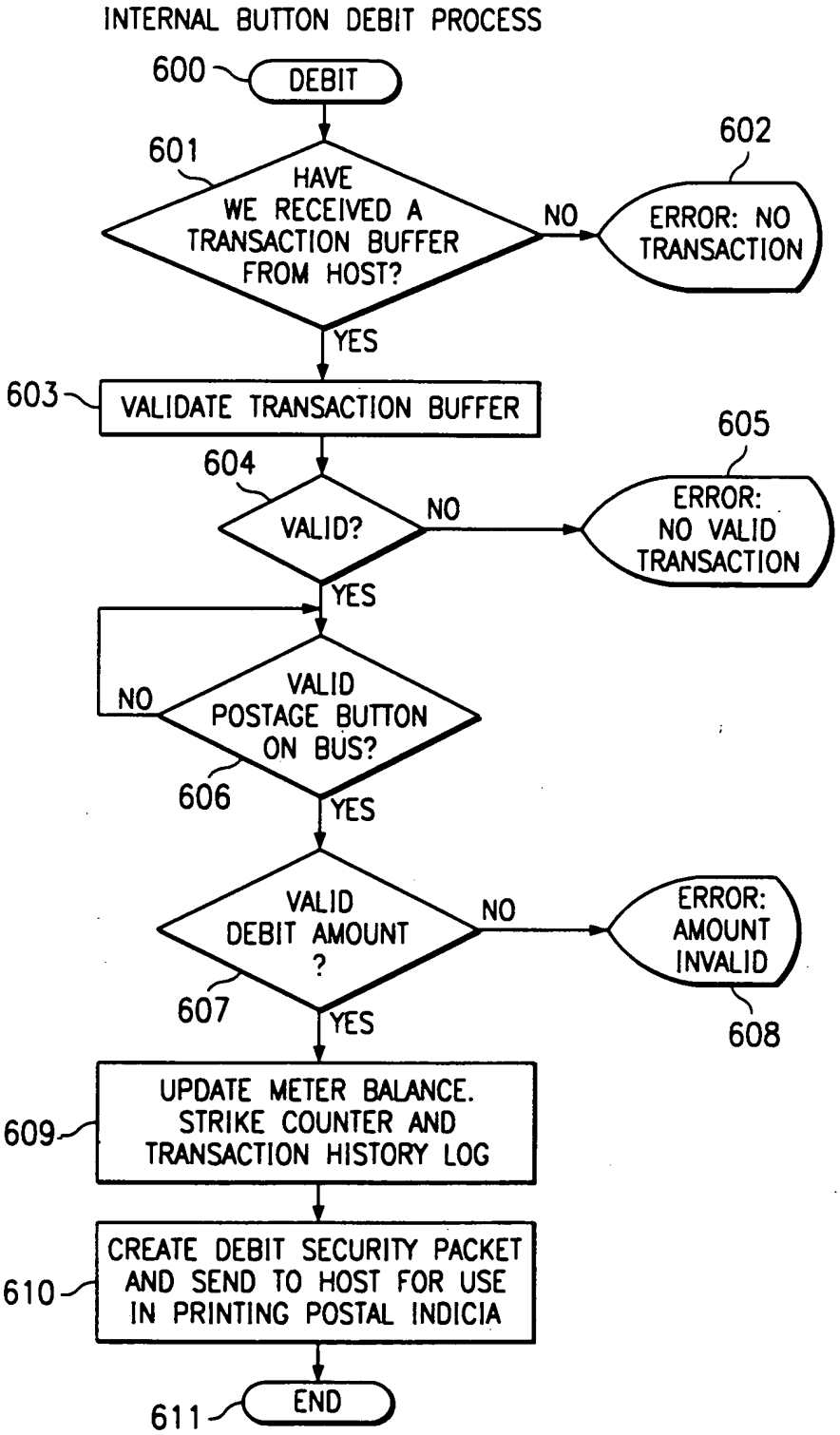

INTERNAL BUTTON DEBIT PROCESS
600
DEBIT
601
HAVE WE RECEIVED A TRANSACTION BUFFER FROM HOST?
NO
602
ERROR: NO TRANSACTION
YES
603
VALIDATE TRANSACTION BUFFER
604
VALID?
NO
605
ERROR: NO VALID TRANSACTION
YES
NO
VALID POSTAGE BUTTON ON BUS?
606
YES
VALID DEBIT AMOUNT ?
NO
ERROR: AMOUNT INVALID
607
YES
608
609
UPDATE METER BALANCE. STRIKE COUNTER AND TRANSACTION HISTORY LOG
610
CREATE DEBIT SECURITY PACKET AND SEND TO HOST FOR USE IN PRINTING POSTAL INDICIA
611
END

FIG. 5B

T0600 "ST062860

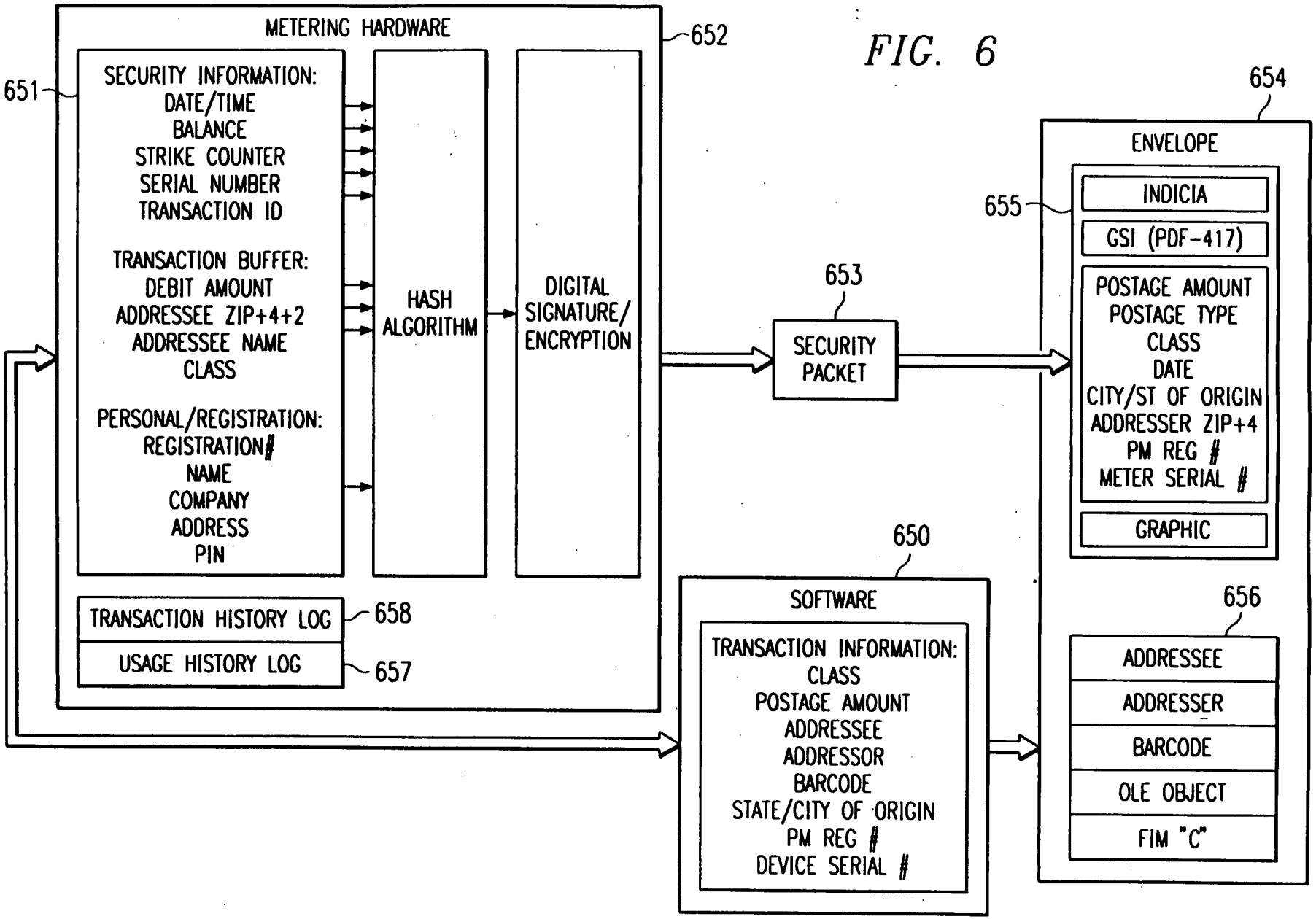


FIG. 6

T06040 ST062860

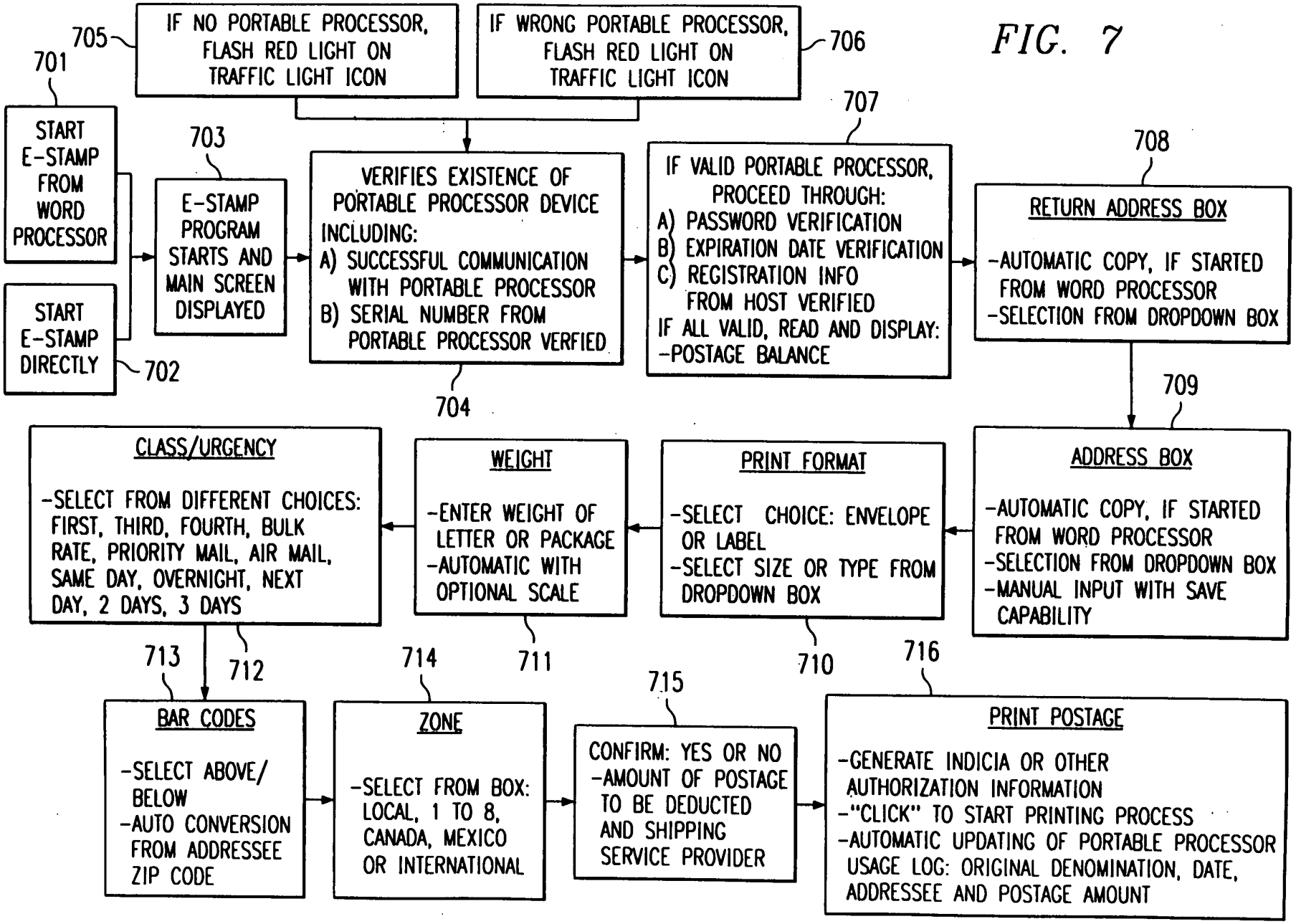


FIG. 7

T06040 ST062560

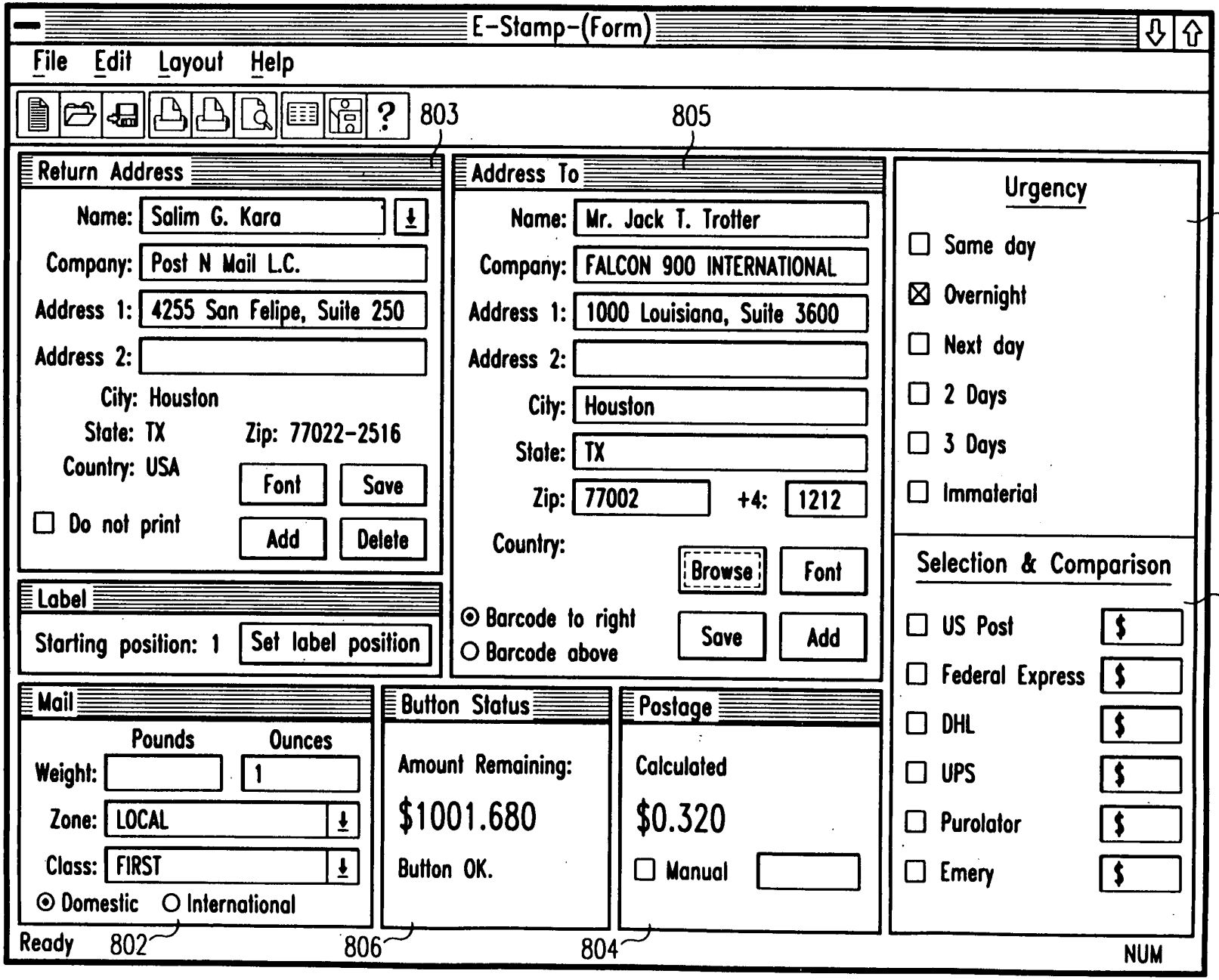


FIG. 8

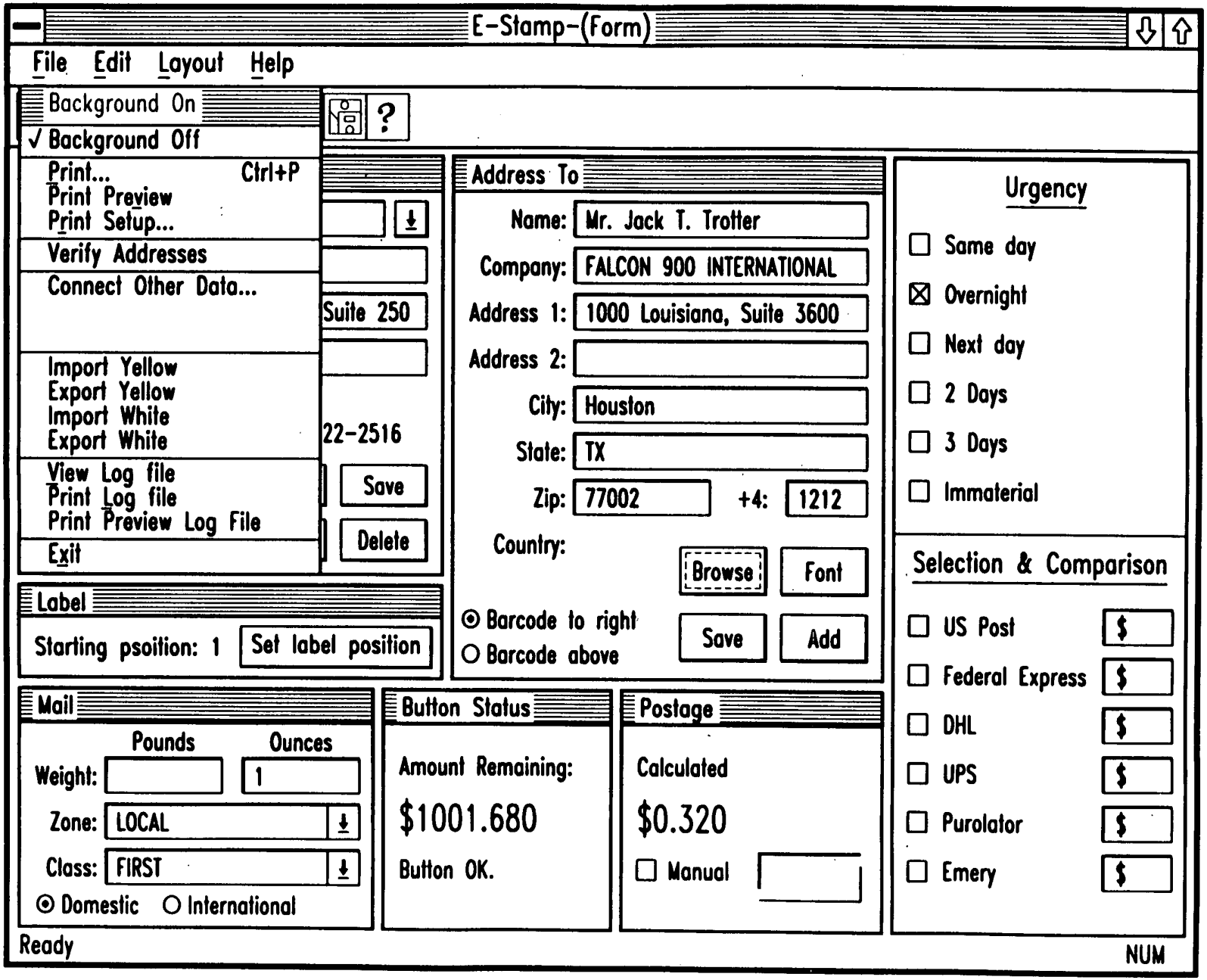
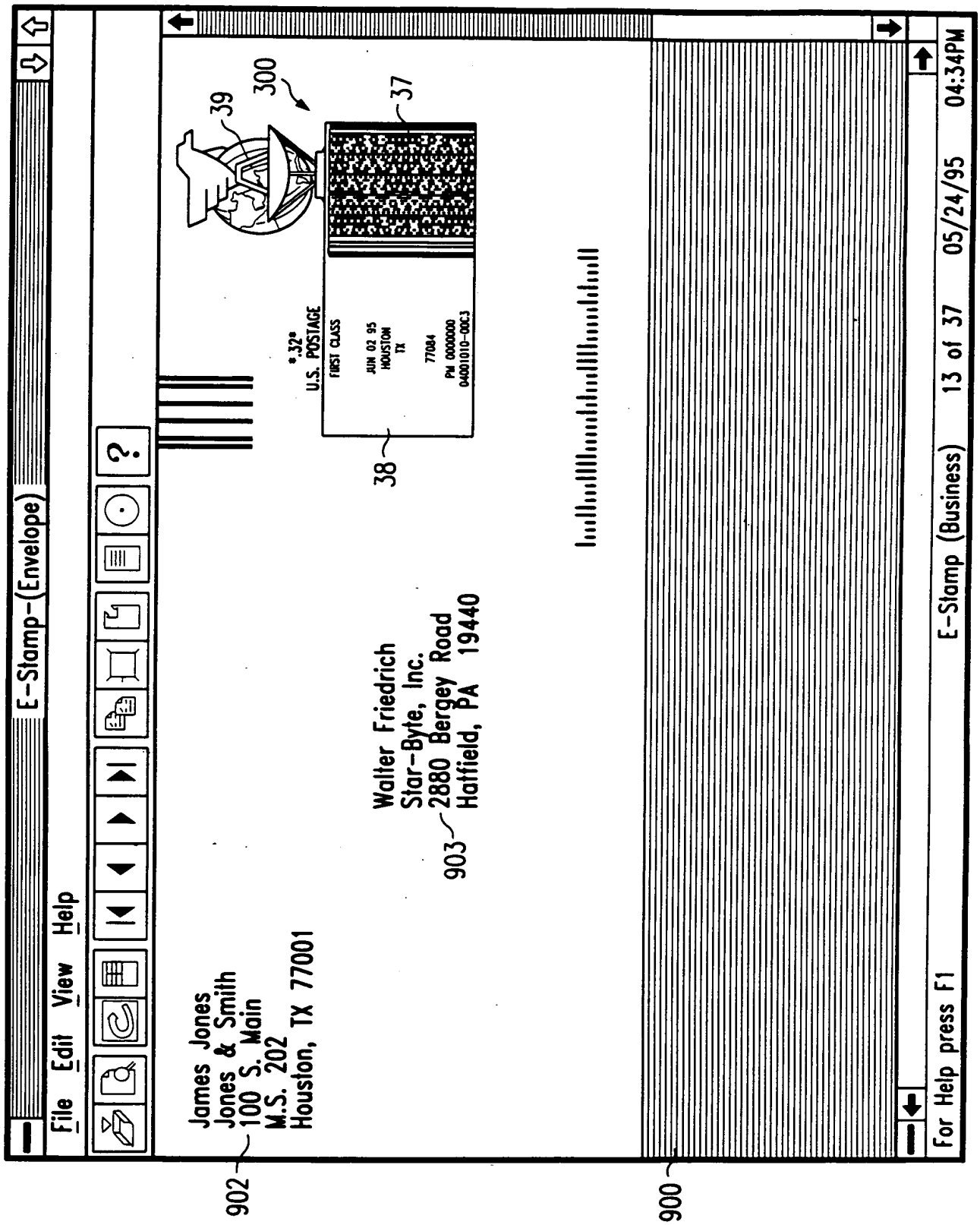

E-Stamp-(Form)
File Edit Layout Help
Background On
✓ Background Off
Print... Ctrl+P
Print Preview
Print Setup...
Verify Addresses
Connect Other Data...
Import Yellow
Export Yellow
Import White
Export White
View Log file
Print Log file
Print Preview Log File
Exit
Suite 250
22-2516
Save
Delete
Address To
Name: Mr. Jack T. Trotter
Company: FALCON 900 INTERNATIONAL
Address 1: 1000 Louisiana, Suite 3600
Address 2:
City: Houston
State: TX
Zip: 77002 +4: 1212
Country:
Browse
Font
Barcode to right
Barcode above
Save
Add
Urgency
Same day
Overnight
Next day
2 Days
3 Days
Immaterial
Selection & Comparison
US Post $
Federal Express $
DHL $
UPS $
Purolator $
Emery $
Label
Starting psoition: 1
Set label position
Mail
Pounds Ounces
Weight: 1
Zone: LOCAL
Class: FIRST
Domestic International
Button Status
Amount Remaining:
$1001.680
Button OK.
Postage
Calculated
$0.320
Manual
Ready
NUM

FIG. 8A

FIG. 9


E-Stamp-(Envelope)
File Edit View Help
James Jones
Jones & Smith
100 S. Main
M.S. 202
Houston, TX 77001
902
Walter Friedrich
Star-Byte, Inc.
2880 Bergey Road
Hatfield, PA 19440
903
38
39
300
37
$.32*
U.S. POSTAGE
FIRST CLASS
JUN 02 95
HOUSTON
TX
77004
PM 0000000
04001010-00C3
900
For Help press F1
E-Stamp (Business)
13 of 37
05/24/95
04:34PM

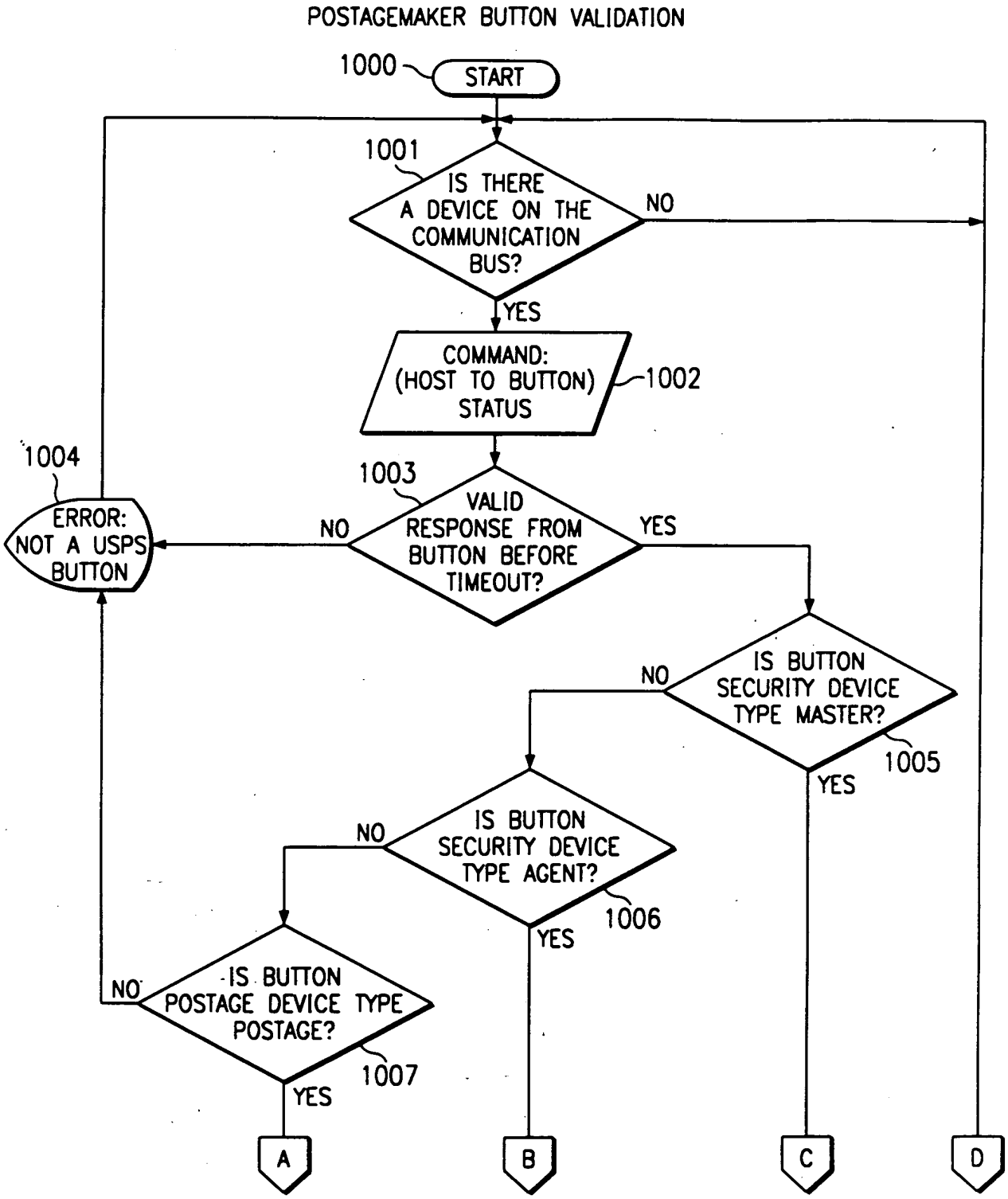

POSTAGEMAKER BUTTON VALIDATION
1000
START
1001
IS THERE A DEVICE ON THE COMMUNICATION BUS?
NO
YES
COMMAND: (HOST TO BUTTON) STATUS
1002
1003
VALID RESPONSE FROM BUTTON BEFORE TIMEOUT?
NO
YES
1004
ERROR: NOT A USPS BUTTON
IS BUTTON SECURITY DEVICE TYPE MASTER?
NO
1005
YES
IS BUTTON SECURITY DEVICE TYPE AGENT?
NO
1006
YES
IS BUTTON POSTAGE DEVICE TYPE POSTAGE?
NO
1007
YES
A
B
C
D

FIG. 10A

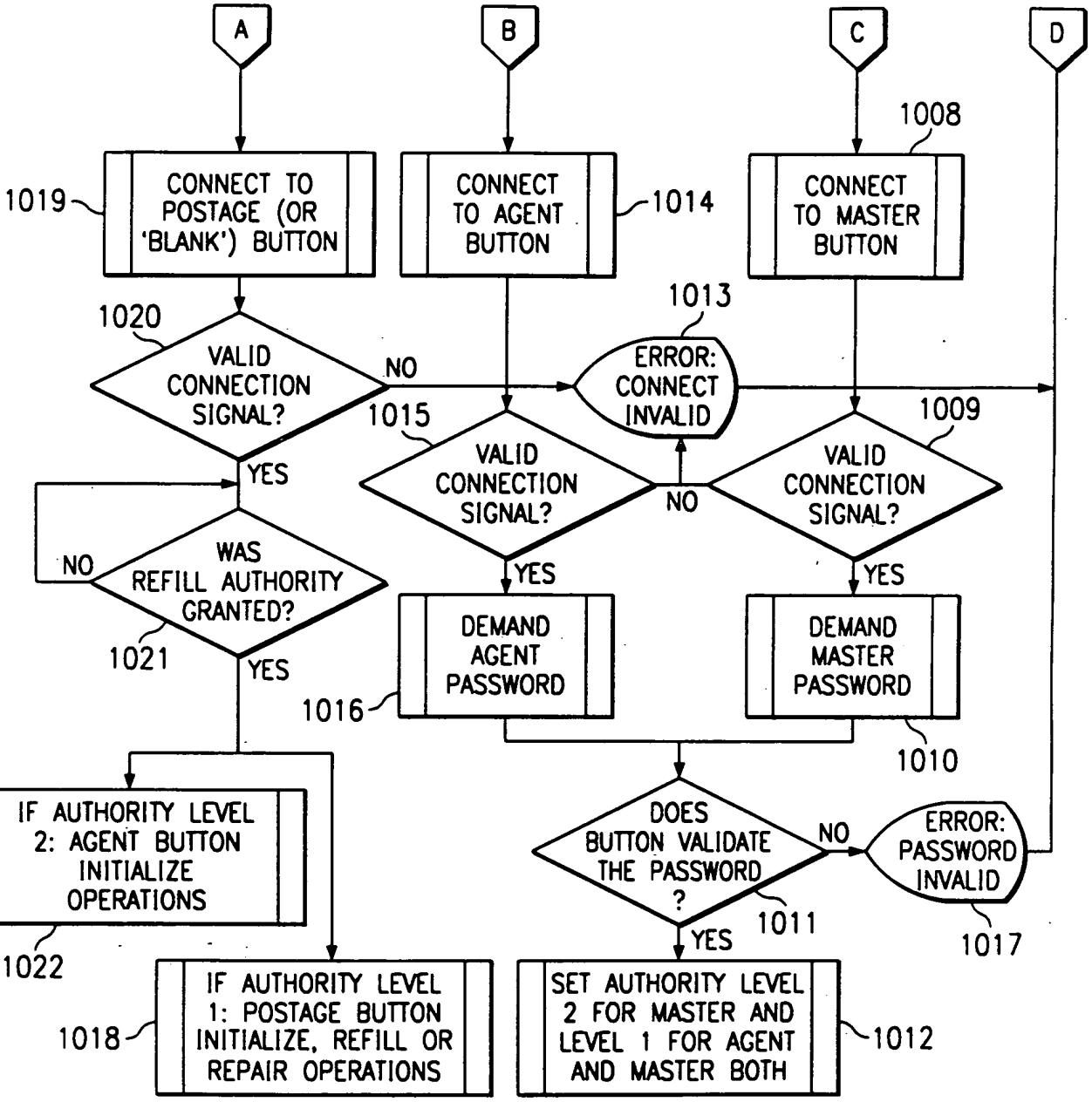

A
B
C
D
1008
1019
CONNECT TO POSTAGE (OR 'BLANK') BUTTON
CONNECT TO AGENT BUTTON
1014
CONNECT TO MASTER BUTTON
1013
1020
VALID CONNECTION SIGNAL?
NO
ERROR: CONNECT INVALID
1015
VALID CONNECTION SIGNAL?
NO
VALID CONNECTION SIGNAL?
1009
YES
NO
WAS REFILL AUTHORITY GRANTED?
1021
YES
YES
YES
DEMAND AGENT PASSWORD
1016
DEMAND MASTER PASSWORD
1010
IF AUTHORITY LEVEL 2: AGENT BUTTON INITIALIZE OPERATIONS
1022
DOES BUTTON VALIDATE THE PASSWORD ?
NO
ERROR: PASSWORD INVALID
1011
1017
YES
IF AUTHORITY LEVEL 1: POSTAGE BUTTON INITIALIZE, REFILL OR REPAIR OPERATIONS
1018
SET AUTHORITY LEVEL 2 FOR MASTER AND LEVEL 1 FOR AGENT AND MASTER BOTH
1012

FIG. 10B

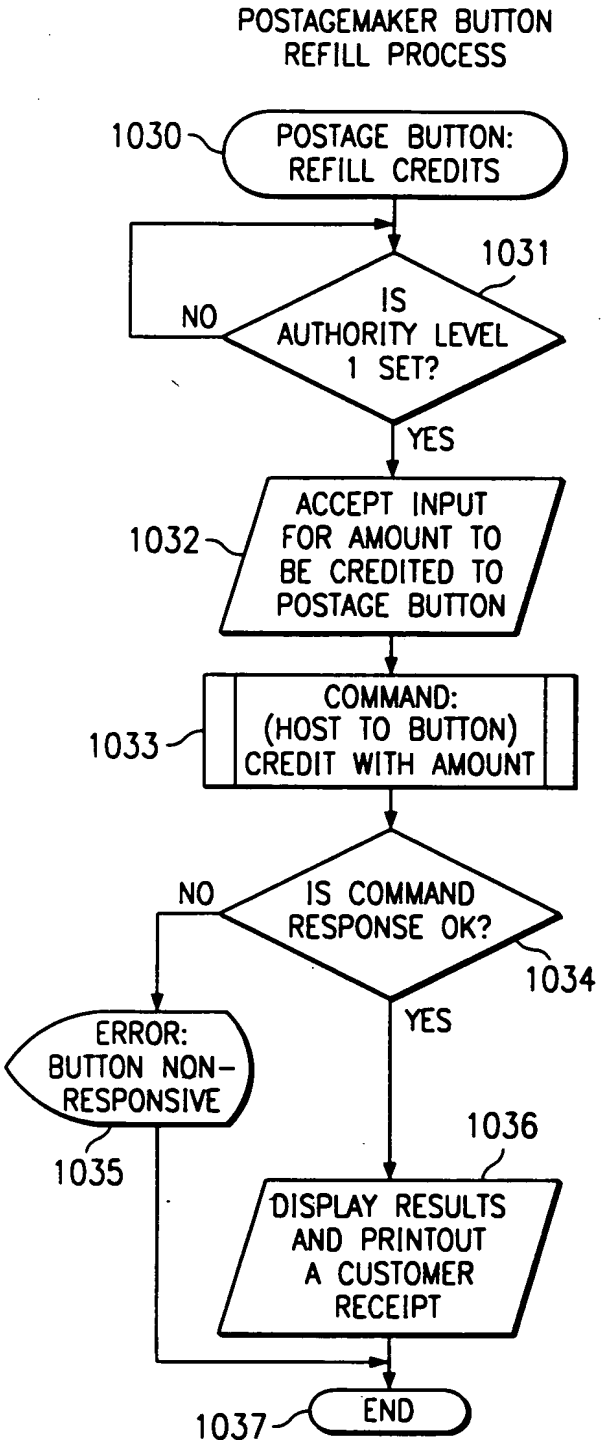


FIG. 10C

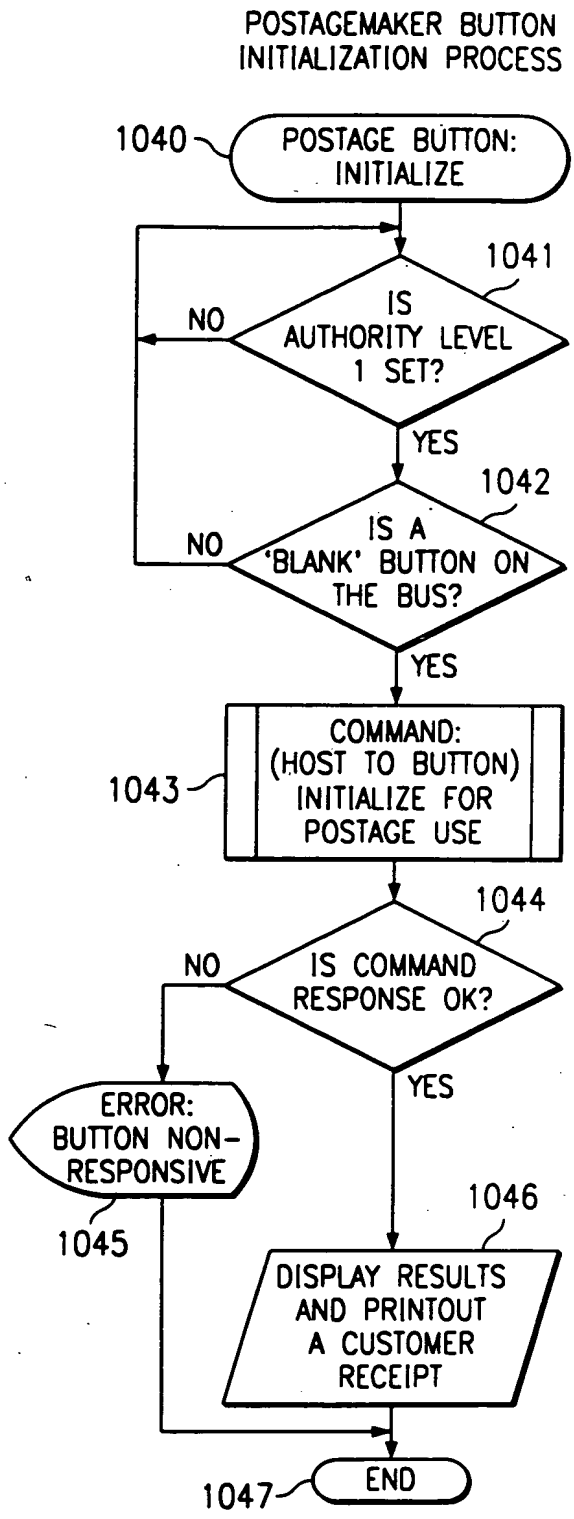


FIG. 10D

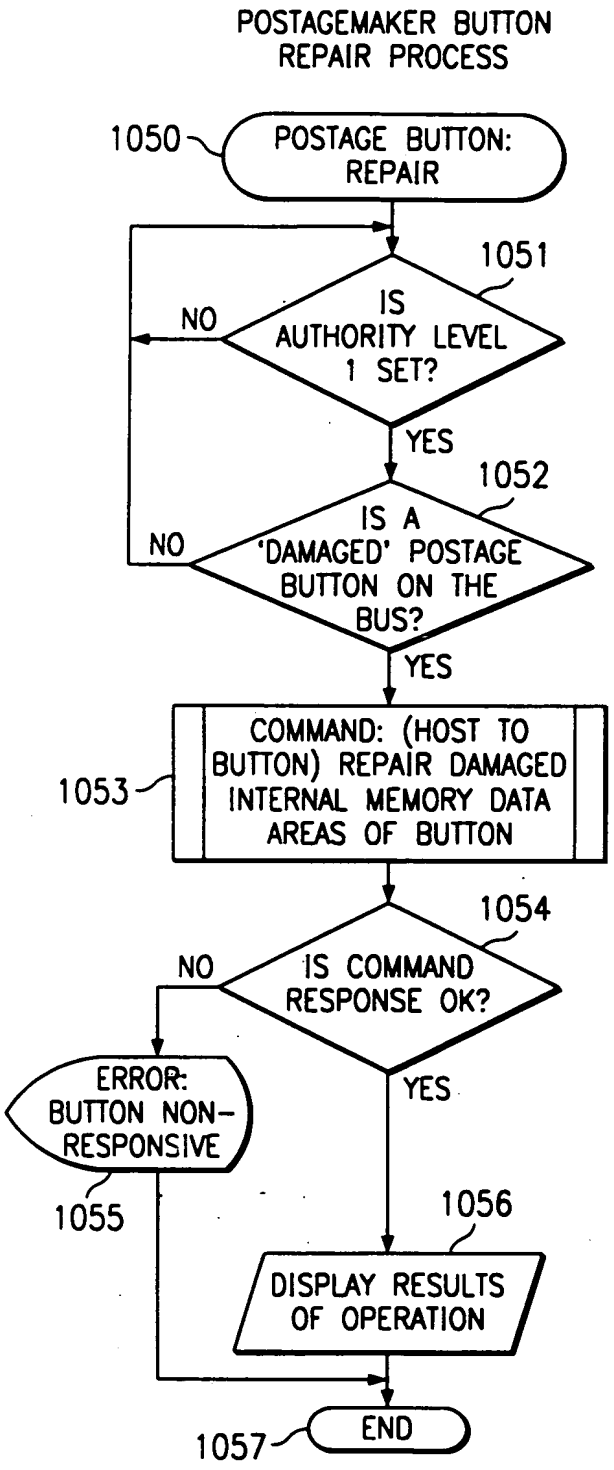


FIG. 10E

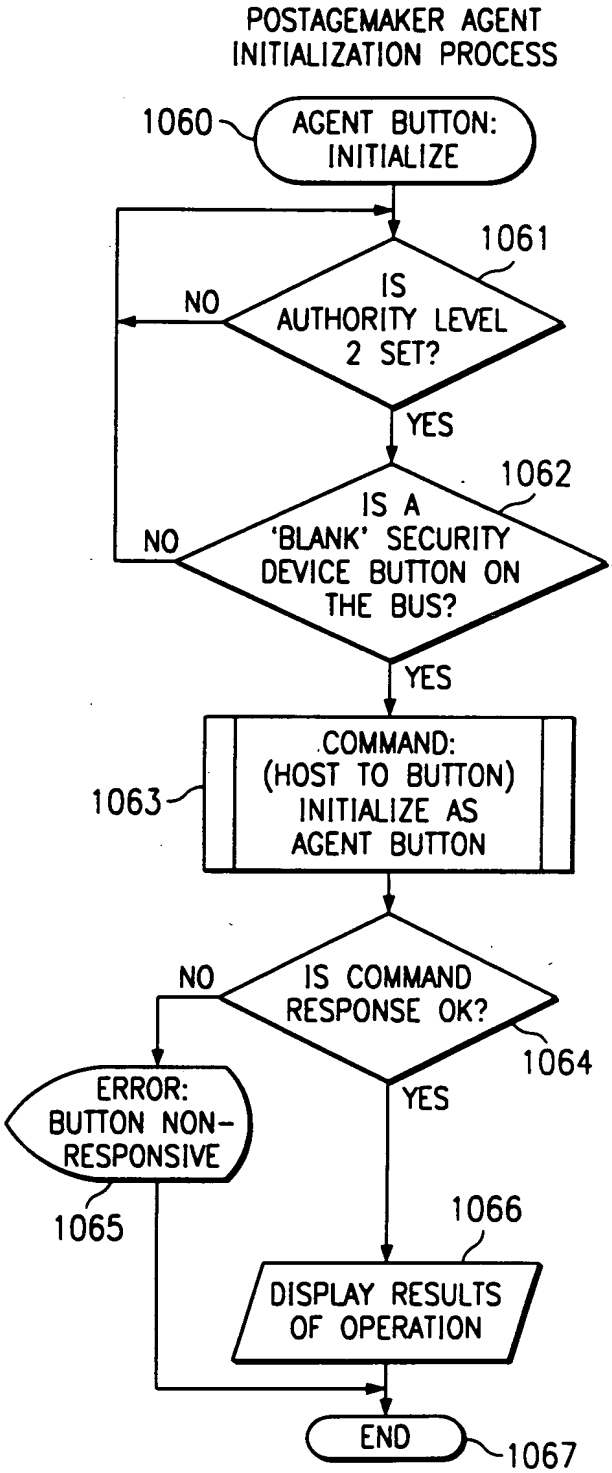


FIG. 10F

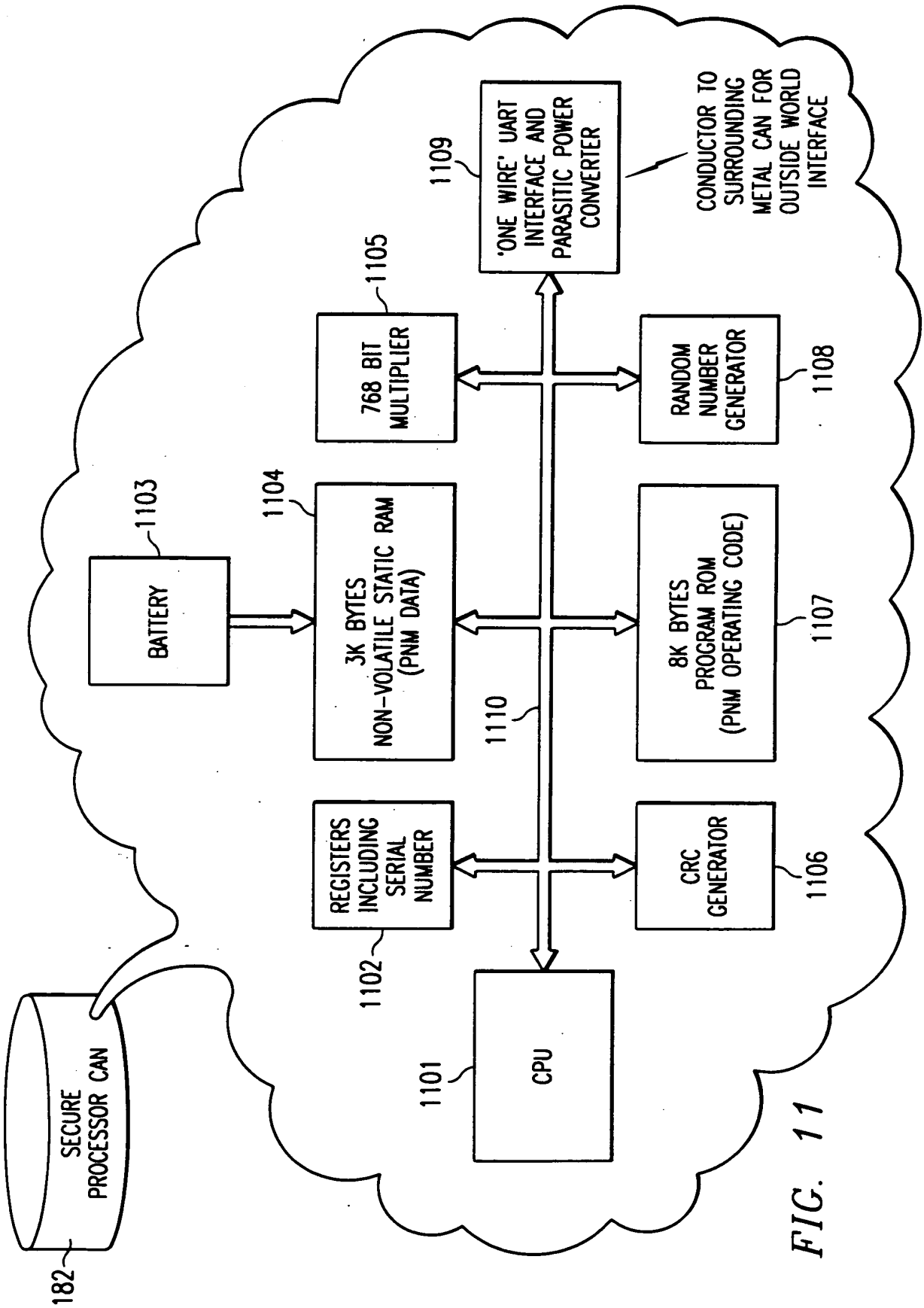

SECURE PROCESSOR CAN
182
BATTERY
1103
3K BYTES NON-VOLATILE STATIC RAM (PNM DATA)
1104
768 BIT MULTIPLIER
1105
'ONE WIRE' UART INTERFACE AND PARASITIC POWER CONVERTER
1109
CONDUCTOR TO SURROUNDING METAL CAN FOR OUTSIDE WORLD INTERFACE
RANDOM NUMBER GENERATOR
1108
8K BYTES PROGRAM ROM (PNM OPERATING CODE)
1107
1110
REGISTERS INCLUDING SERIAL NUMBER
1102
CRC GENERATOR
1106
CPU
1101

FIG. 11

BLOCK DIAGRAM OF MEMORY LAYOUT FOR PREFERRED EMBODIMENT OF PORTABLE POSTAGE PROCESSOR

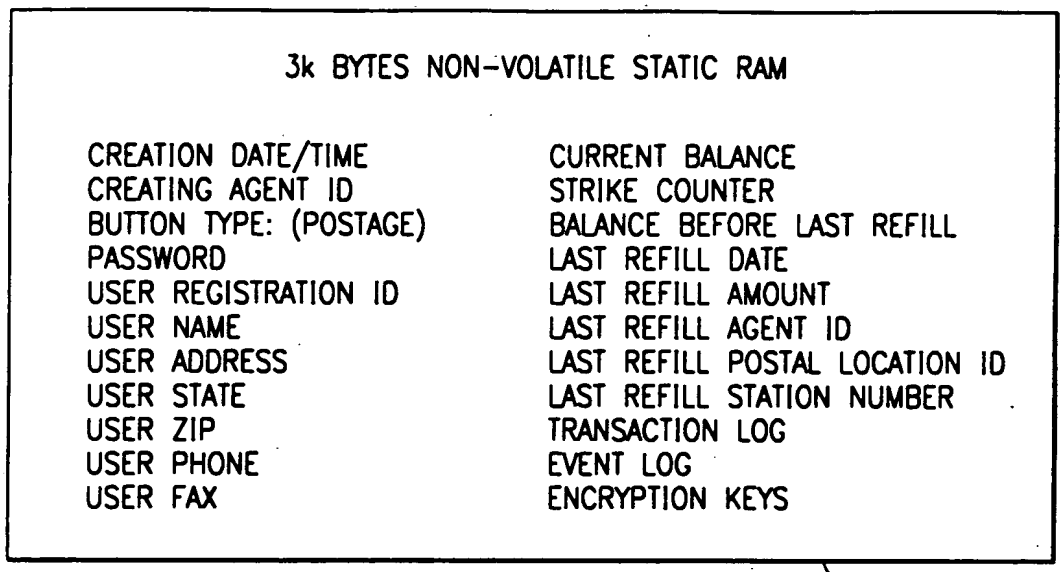


FIG. 12

BLOCK DIAGRAM OF MEMORY LAYOUT FOR PREFERRED EMBODIMENT OF PORTABLE SECURITY DEVICE PROCESSOR FOR AGENT AND MASTER

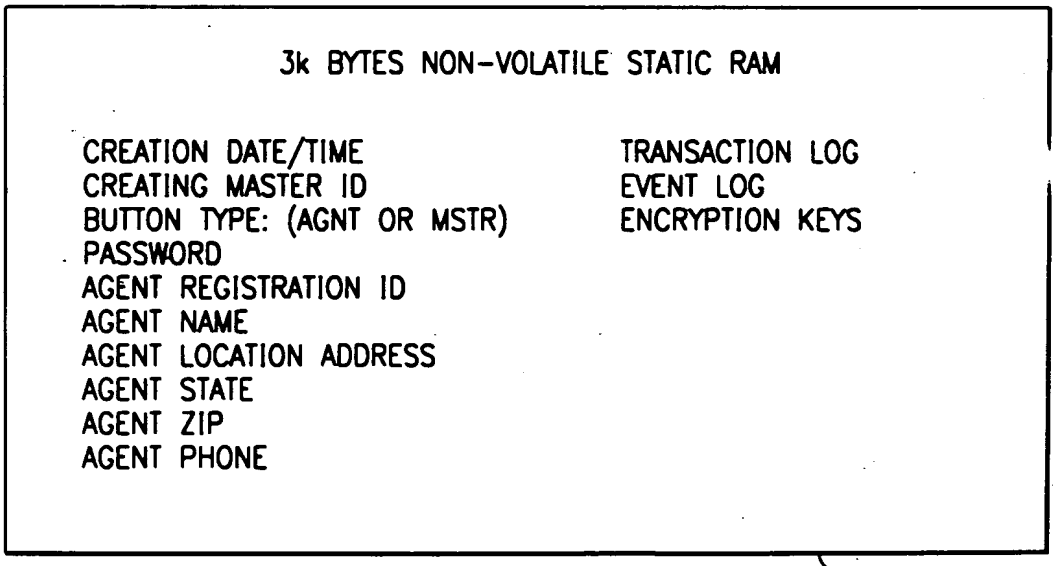


FIG. 13

Tue Oct 5 17:06:26 2004

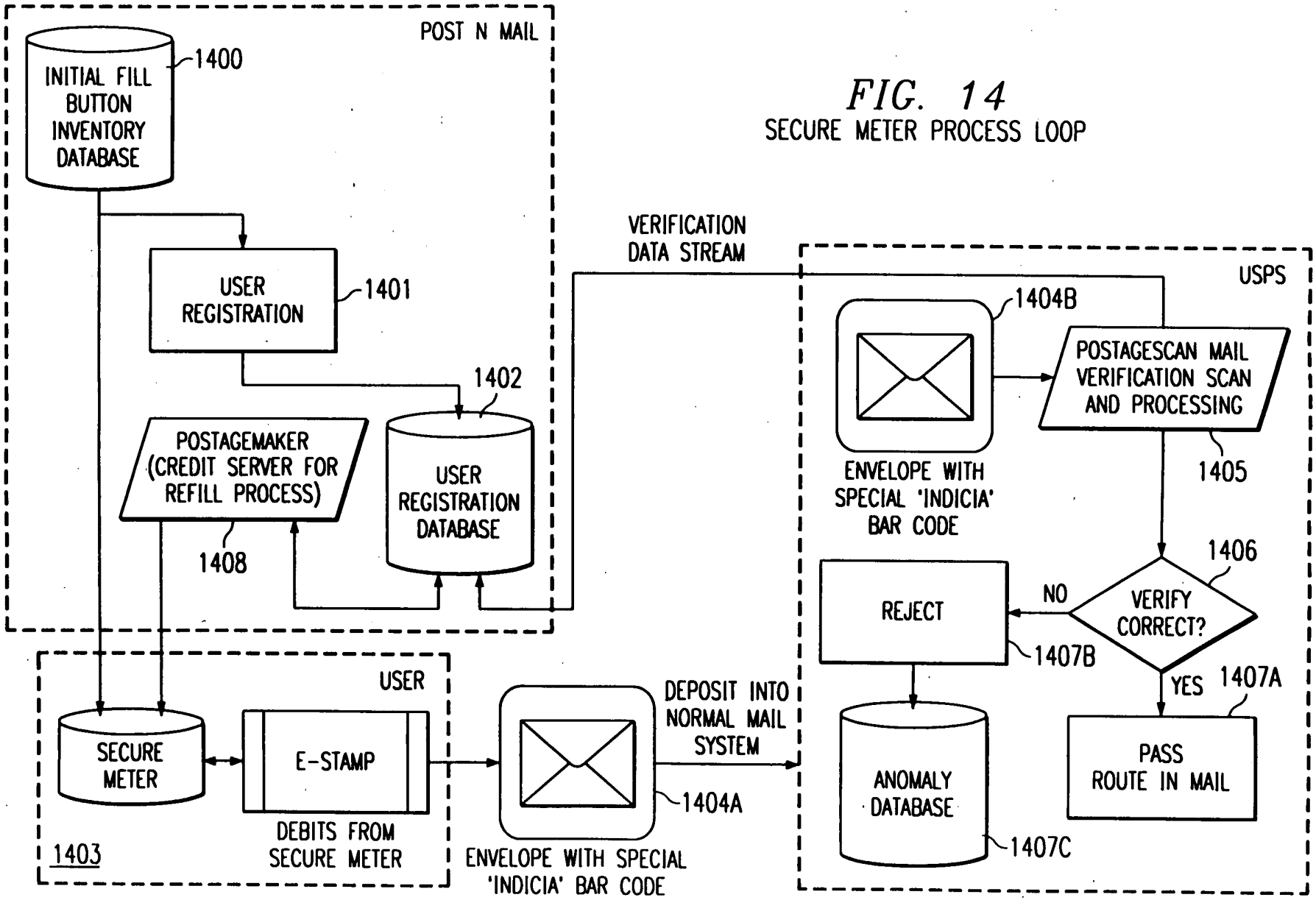


FIG. 14
SECURE METER PROCESS LOOP